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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,139	04/04/2001	Keith E. Moll	1545	2337
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OVERLAND PARK, KS 66251-2100			2687	

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/826,139

Applicant(s)

MOLL ET AL.

Examiner

Un C Cho

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4, 2, 6, 7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. (US 6,434,381 B1) in view of Papadimitriou et al. (US 6,385,458 B1).

Regarding claim 4, Moore discloses receiving a position of the mobile station with a request for local information and services (Moore, Col. 3, lines 32 – 36 and 51 - 56), associating a predetermined region with the position of the mobile station and with the local information and services (Moore, Col. 4, lines 64 – 67), and retrieving the local information and services associated with the predetermined region (Moore, Col. 5, lines 6 – 12).

However, Moore as applied above does not specifically disclose associating a level of granularity with the service identifier, and based on the service identifier instructing the cellular wireless system to determine the position of the mobile station at the associated level of granularity. In an analogous art, Papadimitriou discloses associating a level of granularity with the service

identifier (the accuracy of a mobile phone's location is based on a subscriber priority, Papadimitriou, Col. 4, lines 49 – 57, Col. 5, lines 37 – 46 and 56 – 64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Papadimitriou to the system of Moore in order to allow flexibility in using and allocating mobile communication network resources to estimate the location of a mobile phone, providing additional sources of revenue for mobile communication network operators.

Regarding claim 2, Moore in view of Papadimitriou as applied to claim 4 above discloses location-based server having stored therein instructions to execute the method of claim 4 (Moore, Col. 3, lines 32 – 36 and 51 – 56, Col. 4, lines 64 – 67, Col. 5, lines 6 – 12 and Papadimitriou, Col. 4, lines 49 – 57, Col. 5, lines 37 – 46 and 56 – 64).

Regarding claim 6, Moore in view of Papadimitriou as applied to claim 4 above discloses determining whether the level of granularity is a high level of granularity and when the level of granularity is the high level of granularity instructing position determining equipment to provide the position of the mobile station (the accuracy of a mobile phone's location is based on a subscriber priority, Papadimitriou, Col. 4, lines 49 – 57, Col. 5, lines 37 – 46 and 56 – 64).

Regarding claim 7, Moore in view of Papadimitriou as applied to claim 4 above discloses receiving global position system coordinates from the mobile

station wherein the coordinates represent the position of the mobile station (Moore, Col. 3, lines 24 – 56).

Regarding claim 10, Moore in view of Papadimitriou as applied to claim 4 above discloses reading the local information and services information from a database entry, wherein the database entry is associated with the predetermined region (Moore, Col. 4, lines 64 – 67 and Col. 5, lines 6 – 12).

Regarding claim 11, Moore in view of Papadimitriou as applied to claim 4 above discloses providing the location based information associated with the predetermined region to the mobile station (Moore, Col. 4, lines 64 – 67).

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Papadimitriou as applied to claim 4 above, and further in view of Caughran et al. (US 2002/0107029).

Regarding claim 3, Moore in view of Papadimitriou as applied to claim 4 above does not specifically disclose ascertaining a zone layer for the service identifier, wherein the zone layer is a categorization of zones for the service identifier, selecting a zone from the zone layer wherein the zone corresponds to the position of the mobile station and determining the provider-defined region that encompasses the zone. In an analogous art, Caughran discloses including a zone type in the request, wherein the zone type is a categorization of zones of predetermined geographical area, selecting a geographical data from the zone type, wherein the zone based geographical data corresponds to the position of

the mobile subscriber unit and determining the geographical data with respect to the zone type requested (Caughran, Paragraph 0005, lines 7 – 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Caughran to the modified system of Moore and Papadimitriou in order to provide a more efficient way for obtaining geographical zone data for a mobile subscriber unit.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Papadimitriou as applied to claim 4 above, and further in view of Alperovich et al. (US 6,233,448).

Regarding claim 5, Moore in view of Papadimitriou as applied to claim 4 above discloses determining whether the level of granularity is a low level of granularity (the accuracy of a mobile phone's location is based on a service priority, Papadimitriou, Col. 4, lines 49 – 57, Col. 5, lines 37 – 46 and 56 – 64).

However, Moore in view of Papadimitriou as applied above does not specifically disclose assigning a cell identifier as the position of the mobile station. In an analogous art, Alperovich discloses assigning a cell ID to determine the general position of the mobile station (Alperovich, Col. 3, lines 49 – 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Alperovich to the modified system of Moore and Papadimitriou in order to performing selected

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actions based upon the location of a mobile station in a mobile communications network.

5. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Papadimitriou as applied to claim 4 above, and further in view of Chern (US 2003/0060211).

Regarding claim 8, Moore in view of Papadimitriou as applied to claim 4 above does not specifically disclose mapping the provider-defined region to a universal resource locator, transmitting a request for the location based information to the universal resource locator and receiving a response containing the location based information from the universal resource locator. In an analogous art, Chern discloses creating the service provider to the web page URL, transmitting a request for the location based information to the URL and receiving a response containing the location of the location based information from the URL (Chern, Page 6, Paragraph 0074 and 0075). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Chern to the modified system of Moore and Papadimitriou in order to provide a way to add new features to the communication devices to create a more efficient location based information retrieval system for a wireless communication device.

Regarding claim 15, Moore in view of Papadimitriou and further in view of Chern discloses associating a surrogate identifier with the mobile station,

wherein the request includes the surrogate identifier but no other identifier for the mobile station; determining whether the response contains the surrogate identifier and when the response contains the surrogate identifier associating the location based information with the mobile station (mobile station transmits a request message to the wireless communication system whereas the message inherently contains identification which identifies the mobile station requesting the service, Moore, Col. 4, lines 17 – 63).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richton (US 6,650,902 B1) in view of Papadimitriou et al. (US 6,385,458 B1) and in view of Chern (US 2003/0060211).

Regarding claim 9, Moore discloses a method for providing location based information to a mobile station in communication with a cellular wireless system, the method comprising the steps of receiving a position of the mobile station and a service identifier (Richton, Col. 3, lines 9 – 28); associating a provider-defined region with the position of the mobile station and with the service identifier and retrieving the location based information (Richton, Col. 8, lines 58 – 66), wherein the location based information is associated with the provider-defined region (Richton, Col. 7, lines 50 – 52) and associating a surrogate identifier with the mobile station, wherein the request includes the surrogate identifier but no other identifier for the mobile station; determining whether the response contains the surrogate identifier; and when the response contains the surrogate identifier,

associating the location based information with the mobile station (Richton, Col. 10, lines 36 – 47).

However, Richton as applied above does not specifically disclose associating a level of granularity with the service identifier and based on the service identifier, instructing the cellular wireless system to determine the position of the mobile station at the associated level of granularity. In an analogous art, Papadimitriou discloses associating a level of granularity with the service identifier and based on the service identifier, instructing the cellular wireless system to determine the position of the mobile station at the associated level of granularity (the accuracy of a mobile phone's location is based on a subscriber priority, Papadimitriou, Col. 4, lines 49 – 57, Col. 5, lines 37 – 46 and 56 – 64). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Papadimitriou to the system of Richton in order to allow flexibility in using and allocating mobile communication network resources to estimate the location of a mobile phone, providing additional sources of revenue for mobile communication network operators.

However, Richton in view of Papadimitriou as applied above does not specifically disclose mapping the provider-defined region to a universal resource locator; transmitting a request for the location based information to the universal resource locator; receiving a response containing the location based information from the universal resource locator. In an analogous art, Chern discloses

mapping the provider-defined region to a universal resource locator, transmitting a request for the location based information to the universal resource locator, receiving a response containing the location based information from the universal resource locator (creating the service provider to the web page URL, transmitting a request for the location based information to the URL and receiving a response containing the location of the location based information from the URL (Chern, Page 6, Paragraph 0074 and 0075). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Chern to the modified system of Richton and Papadimitriou in order to provide a way to add new features to the communication devices to create a more efficient location based information retrieval system for a wireless communication device.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richton (US 6,650,902 B1) in view of Papadimitriou et al. (6,385,458 B1)

Regarding claim 12, Richton discloses a wireless switching station (Richton, Fig. 2, 220), location-determining server (Richton, Fig. 3, 303), a location-based controller (Richton, Fig. 3, 301) connected to the wireless switching station and to the location-determining server, receiving a request for the location based information from the switch, wherein the request includes local information and services (Richton, Col. 3, lines 9 – 28), associating a predetermined region with the position of the mobile station and with the local

information and services (Richton, Col. 8, lines 58 – 66), retrieving the local information and services associated with the predetermined region and providing the local information and services to the wireless switching station for forwarding to the mobile station (Richton, Col. 7, lines 50 – 52).

However, Richton as applied above does not specifically disclose associating a level of granularity with the service identifier and based on the service identifier instructing the cellular wireless system to determine the position of the mobile station at the associated level of granularity. In an analogous art, Papadimitriou discloses associating a level of granularity with the service identifier and based on the service identifier instructing the cellular wireless system to determine the position of the mobile station at the associated level of granularity (location of a mobile phone's accuracy is based on a subscriber priority, Papadimitriou, Col. 4, lines 49 – 57, Col. 5, lines 37 – 46 and 56 – 64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Papadimitriou to the system of Richton in order to allow flexibility in using and allocating mobile communication network resources to estimate the location of a mobile phone, providing additional sources of revenue for mobile communication network operators.

8. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richton (US 6,650,902 B1) in view of Papadimitriou et al. (6,385,458 B1) in view of Caughran (US 2002/0107029) and in view of Chern (US 2003/0060211).

Regarding claim 13, Richton discloses a method for providing location based information to a mobile station in communication with a cellular wireless system, the method comprising the steps of receiving a service identifier, wherein the service identifier is associated with a service (Richton, Col. 3, lines 9 – 28, Col. 6, lines 31 – 34 and 46 – 52).

However, Richton does not specifically disclose associating a level of granularity with the service identifier, instructing the cellular wireless system to determine a position of the mobile station at the associated level of granularity. In an analogous art, Papadimitriou discloses associating a level of granularity with the service identifier, instructing the cellular wireless system to determine a position of the mobile station at the associated level of granularity (the accuracy of a mobile phone's location is based on a subscriber priority, Papadimitriou, Col. 4, lines 49 – 57, Col. 5, lines 37 – 46 and 56 – 64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Papadimitriou to the technique of Richton in order to allow flexibility in using and allocating mobile communication network resources to estimate the location of a mobile phone, providing additional sources of revenue for mobile communication network operators.

However, Richton in view of Papadimitriou as applied above does not specifically disclose associating a zone layer with the service identifier, wherein the zone layer is a categorization of zones for the service identifier; selecting a zone from the zone layer wherein the zone corresponds to the position of the mobile station; determining a provider-defined region that encompasses the zone. In an analogous art, Caughran discloses associating a zone layer with the service identifier, wherein the zone layer is a categorization of zones for the service identifier; selecting a zone from the zone layer wherein the zone corresponds to the position of the mobile station and determining a provider-defined region that encompasses the zone (Caughran, Paragraph 0005, lines 7 – 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Caughran to the modified system of Richton and Papadimitriou in order to provide a more efficient way for obtaining geographical zone data for a mobile subscriber unit.

However, Richton in view of Papadimitriou and in view of Caughran does not specifically disclose mapping the provider-defined region to a universal resource locator; transmitting a request for the location based information to the universal resource locator; receiving a response containing the location based information from the universal resource locator and providing the location based information to the mobile station. In an analogous art, Chern discloses mapping the provider-defined region to a universal resource locator, transmitting a request for the location-based information to the universal resource locator, receiving a

response containing the location based information from the universal resource locator and providing the location based information to the mobile station (creating the service provider to the web page URL, transmitting a request for the location based information to the URL and receiving a response containing the location of the location based information from the URL, Chern, Page 6, Paragraph 0074 and 0075). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Chern to the modified system of Richton, Papadimitriou and Caughran in order to provide a way to add new features to the communication devices to create a more efficient location based information retrieval system for a wireless communication device.

Regarding claim 14, Richton in view of Papadimitriou, in view of Caughran and in view of Chern as applied to claim 13 above discloses location-based server having stored therein instructions to execute the method of claim 13 (Richton, Col. 3, lines 9 – 28).

Response to Arguments

9. Applicant's arguments with respect to claims 2 – 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un C Cho whose telephone number is (703) 305-8725. The examiner can normally be reached on M ~ F 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (703) 306-3016. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SONNY TRINH
PRIMARY EXAMINEE

Un C Cho
Examiner
Art Unit 2687

3/25/05 uc